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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/541,752DATE: 04/19/2000
TIME: 17:53:00

Input Set: I541752.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

J/S
ENTERED

1 <110> APPLICANT: Gao, Zeren
2 Hart, Charles E.
3 Piddington, Christopher S.
4 Sheppard, Paul O.
5 Shoemaker, Kimberly E.
6 Gilbertson, Debra G.
7 West, James W.
8 <120> TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF3
9 <130> FILE REFERENCE: 98-60C1
10 <140> CURRENT APPLICATION NUMBER: US/09/541,752
11 <141> CURRENT FILING DATE: 2000-03-31
12 <160> NUMBER OF SEQ ID NOS: 50
13 <170> SOFTWARE: FastSEQ for Windows Version 3.0
14 <210> SEQ ID NO 1
15 <211> LENGTH: 1760
16 <212> TYPE: DNA
17 <213> ORGANISM: Homo sapiens
18 <220> FEATURE:
19 <221> NAME/KEY: CDS
20 <222> LOCATION: (154) ... (1191)
21 <400> SEQUENCE: 1
22 attatgtgga aactaccctg cgattctctg ctgccagagc aggctcgccg cttccacccc 60
23 agtgcagcct tccccctggcg gtggtaaaag agactcgaa gtcgctgctt ccaaagtgcc 120
24 cggcgtgagt gagctctcac cccagtcagc caa atg agc ctc ttc ggg ctt ctc 174
25 Met Ser Leu Phe Gly Leu Leu
26 1 5
27 ctg ctg aca tct gcc ctg gcc ggc cag aga cag ggg act cag gcg gaa 222
28 Leu Leu Thr Ser Ala Leu Ala Gly Gln Arg Gln Gly Thr Gln Ala Glu
29 10 15 20
30 tcc aac ctg agt agt aaa ttc cag ttt tcc agc aac aag gaa cag aac 270
31 Ser Asn Leu Ser Ser Lys Phe Gln Phe Ser Ser Asn Lys Glu Gln Asn
32 25 30 35
33 gga gta caa gat cct cag cat gag aga att att act gtg tct act aat 318
34 Gly Val Gln Asp Pro Gln His Glu Arg Ile Ile Thr Val Ser Thr Asn
35 40 45 50 55
36 gga agt att cac agc cca agg ttt cct cat act tat cca aga aat acg 366
37 Gly Ser Ile His Ser Pro Arg Phe Pro His Thr Tyr Pro Arg Asn Thr
38 60 65 70
39 gtc ttg gta tgg aga tta gta gca gta gag gaa aat gta tgg ata caa 414
40 Val Leu Val Trp Arg Leu Val Ala Val Glu Glu Asn Val Trp Ile Gln
41 75 80 85
42 ctt acg ttt gat gaa aga ttt ggg ctt gaa gac cca gaa gat gac ata 462
43 Leu Thr Phe Asp Glu Arg Phe Gly Leu Glu Asp Pro Glu Asp Asp Ile
44 90 95 100

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45	tgc aag tat gat ttt gta gaa gtt gag gaa ccc agt gat gga act ata	510
46	Cys Lys Tyr Asp Phe Val Glu Val Glu Glu Pro Ser Asp Gly Thr Ile	
47	105 110 115	
48	tta ggg cgc tgg tgt ggt tct ggt act gta cca gga aaa cag att tct	558
49	Leu Gly Arg Trp Cys Gly Ser Gly Thr Val Pro Gly Lys Gln Ile Ser	
50	120 125 130 135	
51	aaa gga aat caa att agg ata aga ttt gta tct gat gaa tat ttt cct	606
52	Lys Gly Asn Gln Ile Arg Ile Arg Phe Val Ser Asp Glu Tyr Phe Pro	
53	140 145 150	
54	tct gaa cca ggg ttc tgc atc cac tac aac att gtc atg cca caa ttc	654
55	Ser Glu Pro Gly Phe Cys Ile His Tyr Asn Ile Val Met Pro Gln Phe	
56	155 160 165	
57	aca gaa gct gtg agt cct tca gtg cta ccc cct tca gct ttg cca ctg	702
58	Thr Glu Ala Val Ser Pro Val Leu Pro Pro Ser Ala Leu Pro Leu	
59	170 175 180	
60	gac ctg ctt aat aat gct ata act gcc ttt agt acc ttg gaa gac ctt	750
61	Asp Leu Leu Asn Asn Ala Ile Thr Ala Phe Ser Thr Leu Glu Asp Leu	
62	185 190 195	
63	att cga tat ctt gaa cca gag aga tgg cag ttg gac tta gaa gat cta	798
64	Ile Arg Tyr Leu Glu Pro Glu Arg Trp Gln Leu Asp Leu Glu Asp Leu	
65	200 205 210 215	
66	tat agg cca act tgg caa ctt ctt ggc aag gct ttt gtt ttt gga aga	846
67	Tyr Arg Pro Thr Trp Gln Leu Leu Gly Lys Ala Phe Val Phe Gly Arg	
68	220 225 230	
69	aaa tcc aga gtg gtg gat ctg aac ctt cta aca gag gag gta aga tta	894
70	Lys Ser Arg Val Val Asp Leu Asn Leu Leu Thr Glu Glu Val Arg Leu	
71	235 240 245	
72	tac agc tgc aca cct cgt aac ttc tca gtg tcc ata agg gaa gaa cta	942
73	Tyr Ser Cys Thr Pro Arg Asn Phe Ser Val Ser Ile Arg Glu Glu Leu	
74	250 255 260	
75	aag aga acc gat acc att ttc tgg cca ggt tgt ctc ctg gtt aaa cgc	990
76	Lys Arg Thr Asp Thr Ile Phe Trp Pro Gly Cys Leu Leu Val Lys Arg	
77	265 270 275	
78	tgt ggt ggg aac tgt gcc tgt tgt ctc cac aat tgc aat gaa tgt caa	1038
79	Cys Gly Gly Asn Cys Ala Cys Cys Leu His Asn Cys Asn Glu Cys Gln	
80	280 285 290 295	
81	tgt gtc cca agc aaa gtt act aaa aaa tac cac gag gtc ctt cag ttg	1086
82	Cys Val Pro Ser Lys Val Thr Lys Tyr His Glu Val Leu Gln Leu	
83	300 305 310	
84	aga cca aag acc ggt gtc agg gga ttg cac aaa tca ctc acc gac gtg	1134
85	Arg Pro Lys Thr Gly Val Arg Gly Leu His Lys Ser Leu Thr Asp Val	
86	315 320 325	
87	gcc ctg gag cac cat gag gag tgt gac tgt gtg tgc aga ggg agc aca	1182
88	Ala Leu Glu His His Glu Glu Cys Asp Cys Val Cys Arg Gly Ser Thr	
89	330 335 340	
90	gga gga tag cccatcacc accagcagct cttggccaga gctgtgcagt	1231
91	Gly Gly	
92	345	
93	gcagtggctg attctattag agaacgtatg cggttatctcc atcctaata tcagttgttt	1291
94	gcttcaagga cctttcatct tcaggattta cagtgcattc tgaaagagga gacatcaaac	1351

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95 agaatttagga gttgtgcaac agctctttg agaggaggcc taaaggacag gagaaaaggt 1411
 96 cttcaatcgt gaaaaagaaaa ttaaatgttg tataaatag atcaccagct agtttcagag 1471
 97 ttaccatgtta cgattccac tagctgggtt ctgtatttca gttcttcga tacggcttag 1531
 98 ggtaatgtca gtacaggaaa aaaactgtgc aagtgagcac ctgattccgt tgccttgctt 1591
 99 aactctaaag ctccatgtcc tgggcctaaa atcgataaa atctggattt tttttttttt 1651
 100 ttttgctca tattcacata tgtaaaccag aacattctat gtactacaaa cctggtttt 1711
 101 aaaaaggaac tatgttgcata tgaattaaac ttgtgtcgtg ctgatagga 1760
 102 <210> SEQ ID NO 2
 103 <211> LENGTH: 345
 104 <212> TYPE: PRT
 105 <213> ORGANISM: Homo sapiens
 106 <400> SEQUENCE: 2
 Met Ser Leu Phe Gly Leu Leu Leu Leu Thr Ser Ala Leu Ala Gly Gln
 108 1 5 10 15
 Arg Gln Gly Thr Gln Ala Glu Ser Asn Leu Ser Ser Lys Phe Gln Phe
 109 20 25 30
 Ser Ser Asn Lys Glu Gln Asn Gly Val Gln Asp Pro Gln His Glu Arg
 111 35 40 45
 Ile Ile Thr Val Ser Thr Asn Gly Ser Ile His Ser Pro Arg Phe Pro
 113 50 55 60
 His Thr Tyr Pro Arg Asn Thr Val Leu Val Trp Arg Leu Val Ala Val
 115 65 70 75 80
 Glu Glu Asn Val Trp Ile Gln Leu Thr Phe Asp Glu Arg Phe Gly Leu
 117 85 90 95
 Glu Asp Pro Glu Asp Asp Ile Cys Lys Tyr Asp Phe Val Glu Val Glu
 119 100 105 110
 Glu Pro Ser Asp Gly Thr Ile Leu Gly Arg Trp Cys Gly Ser Gly Thr
 121 115 120 125
 Val Pro Gly Lys Gln Ile Ser Lys Gly Asn Gln Ile Arg Ile Arg Phe
 123 130 135 140
 Val Ser Asp Glu Tyr Phe Pro Ser Glu Pro Gly Phe Cys Ile His Tyr
 125 145 150 155 160
 Asn Ile Val Met Pro Gln Phe Thr Glu Ala Val Ser Pro Ser Val Leu
 127 165 170 175
 Pro Pro Ser Ala Leu Pro Leu Asp Leu Leu Asn Asn Ala Ile Thr Ala
 129 180 185 190
 Phe Ser Thr Leu Glu Asp Leu Ile Arg Tyr Leu Glu Pro Glu Arg Trp
 131 195 200 205
 Gln Leu Asp Leu Glu Asp Leu Tyr Arg Pro Thr Trp Gln Leu Leu Gly
 133 210 215 220
 Lys Ala Phe Val Phe Gly Arg Lys Ser Arg Val Val Asp Leu Asn Leu
 135 225 230 235 240
 Leu Thr Glu Glu Val Arg Leu Tyr Ser Cys Thr Pro Arg Asn Phe Ser
 137 245 250 255
 Val Ser Ile Arg Glu Glu Leu Lys Arg Thr Asp Thr Ile Phe Trp Pro
 139 260 265 270
 Gly Cys Leu Leu Val Lys Arg Cys Gly Gly Asn Cys Ala Cys Cys Leu
 141 275 280 285
 His Asn Cys Asn Glu Cys Gln Cys Val Pro Ser Lys Val Thr Lys Lys
 143 290 295 300

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Cys Xaa Xaa

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RAW SEQUENCE LISTING
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Input Set: I541752.RAW

W-->	195	1	5	10	15
	196	Xaa			
	197	20	25	30	
W-->	198	Xaa Xaa Cys Xaa Gly Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa			
	199	35	40	45	
W-->	200	Xaa			
	201	50	55	60	
W-->OK	202	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa			
	203	65	70	75	80
W-->	204	Xaa			
	205	85	90		95
W-->	206	Xaa			
	207	100	105		110
W-->	208	Xaa Cys Xaa Cys			
	209	115			
	210	<210> SEQ ID NO 4			
	211	<211> LENGTH: 24			
	212	<212> TYPE: PRT			
	213	<213> ORGANISM: Artificial Sequence			
	214	<220> FEATURE:			
	215	<223> OTHER INFORMATION: peptide motif			
	216	<220> FEATURE:			
	217	<221> NAME/KEY: VARIANT			
	218	<222> LOCATION: (2)...(2)			
	219	<223> OTHER INFORMATION: Xaa is Lys or Arg			
	220	<220> FEATURE:			
	221	<221> NAME/KEY: VARIANT			
	222	<222> LOCATION: (4)...(4)			
	223	<223> OTHER INFORMATION: Xaa is Asp, Asn or Glu			
	224	<220> FEATURE:			
	225	<221> NAME/KEY: VARIANT			
	226	<222> LOCATION: (5)...(5)			
	227	<223> OTHER INFORMATION: Xaa is Trp, Tyr or Phe			
	228	<220> FEATURE:			
	229	<221> NAME/KEY: VARIANT			
	230	<222> LOCATION: (6)...(16)			
	231	<223> OTHER INFORMATION: Xaa is any amino acid			
	232	<220> FEATURE:			
	233	<221> NAME/KEY: VARIANT			
	234	<222> LOCATION: (17)...(20)			
	235	<223> OTHER INFORMATION: Xaa is any amino acid or not present			
	236	<220> FEATURE:			
	237	<221> NAME/KEY: VARIANT			
	238	<222> LOCATION: (22)...(22)			
	239	<223> OTHER INFORMATION: Xaa is Lys or Arg			
	240	<220> FEATURE:			
	241	<221> NAME/KEY: VARIANT			
	242	<222> LOCATION: (23)...(23)			
---	243	<223> OTHER INFORMATION: Xaa is Trp, Tyr or Phe			
		<400> SEQUENCE: 4			

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

P) R

Input Set: I541752.RAW

Line ? Error/Warning

Original Text

91 W Line data has been corrected
 194 W "N" or "Xaa" used: Feature required
 196 W "N" or "Xaa" used: Feature required
 198 W "N" or "Xaa" used: Feature required
 200 W "N" or "Xaa" used: Feature required
 202 W "N" or "Xaa" used: Feature required
 204 W "N" or "Xaa" used: Feature required
 206 W "N" or "Xaa" used: Feature required
 208 W "N" or "Xaa" used: Feature required
 245 W "N" or "Xaa" used: Feature required
 247 W "N" or "Xaa" used: Feature required
 270 W "N" or "Xaa" used: Feature required
 271 W "N" or "Xaa" used: Feature required
 272 W "N" or "Xaa" used: Feature required
 273 W "N" or "Xaa" used: Feature required
 274 W "N" or "Xaa" used: Feature required
 275 W "N" or "Xaa" used: Feature required
 276 W "N" or "Xaa" used: Feature required
 277 W "N" or "Xaa" used: Feature required
 278 W "N" or "Xaa" used: Feature required
 279 W "N" or "Xaa" used: Feature required
 280 W "N" or "Xaa" used: Feature required
 281 W "N" or "Xaa" used: Feature required
 282 W "N" or "Xaa" used: Feature required
 283 W "N" or "Xaa" used: Feature required
 284 W "N" or "Xaa" used: Feature required
 285 W "N" or "Xaa" used: Feature required
 286 W "N" or "Xaa" used: Feature required
 287 W "N" or "Xaa" used: Feature required
 299 W "N" or "Xaa" used: Feature required
 311 W "N" or "Xaa" used: Feature required
 323 W "N" or "Xaa" used: Feature required
 335 W "N" or "Xaa" used: Feature required
 347 W "N" or "Xaa" used: Feature required
 359 W "N" or "Xaa" used: Feature required
 379 W "N" or "Xaa" used: Feature required
 391 W "N" or "Xaa" used: Feature required
 403 W "N" or "Xaa" used: Feature required
 415 W "N" or "Xaa" used: Feature required
 427 W "N" or "Xaa" used: Feature required
 455 W "N" or "Xaa" used: Feature required
 467 W "N" or "Xaa" used: Feature required
 479 W "N" or "Xaa" used: Feature required
 491 W "N" or "Xaa" used: Feature required
 661 W Line data has been corrected
 850 W Line data has been corrected

Gly Gly *
 Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
 Xaa Xaa Cys Xaa Gly Xaa Cys Xaa Xaa Xaa X
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa X
 Xaa X
 Xaa X
 Xaa Cys Xaa Cys
 Cys Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
 Xaa Xaa Xaa Xaa Gly Xaa Xaa Cys
 atgwsnytnt tyggnytnyt nytnytnacn wsngcnyt
 cargcngarw snaayytnws nwsnaartty carttyws
 gtnargayc cncarcauga rmgmthath acngtnws
 ccnmgnattyccncayacnta yccnmgnay acngtnyt
 gargarayg tntggathca rytnacntty gaygarmg
 gaygayatht gyaartayga yttygtngar gtngarga
 ggnmgntggt gyggnsnng nacngtnccn ggnaarca
 mgnathmgnt tygtwnsnga ygartaytty ccnwsnnga
 aayathgtna tgccncartt yaengargcn gtnwsncc
 ytnccnytng ayytnytnaa yaaygcnath acngcnnt
 mgntayytng arccngarmg ntggcarytn gayytnnga
 carytnytng gnaargcntt ygtnttyggn mgnaarws
 ytnacngarg argtnmgnyt ntaywsntgy acnccnmng
 gargaraytna armgnacnga yacnathtty tggccnng
 ggnngnaayt gygcntgytg yytncayaay tgyaayga
 gtnacnaara artaycayga rgtntncar ytnmgncc
 cayaarwsny tnacngaygt ngcnytngar caycayga
 ggnwsnacng gnggn
 mgntgyggng gnaaytg
 mgntgydsng gnwrytg
 carywnccns hrcanck
 ttytggccng gntgyyt
 ntndnccnn sntgybt
 avrcansnng gnhhnan
 caynnnnvnt gyvvntg
 canbrcanb nnnnrtg
 tgyacnccnm gnaaytt
 tgyhnnmcnm knrmndh
 dhnkynmkng knndrca
 ywnggnmrnt dbtgygg
 ccrcavhany knccnwr
 tdbccnmand vntaycc
 ggrtanhnt knggvha
 His Glu Arg Cys Asp Cys Ile Cys Ser Ser A
 Gly *

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CORRECTION SUMMARY
PATENT APPLICATION US/09/541,752

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Line	Original Text	Corrected Data
91	Gly Gly *	Gly Gly
661	His Glu Arg Cys Asp Cys Ile Cys Ser Ser A	His Glu Arg Cys Asp Cys Ile Cys Ser Ser A
850	Gly *	Gly